Claims:

1. Stable, aqueous dispersion containing powders A and B,
   - wherein powder A is an amorphous silicon dioxide powder having an average particle diameter of 0.05 to 0.7 μm and a BET surface area of 5 to 50 m^2/g, and
   - wherein powder B is a metal oxide or non-metal oxide powder consisting of aggregates of intergrown primary particles and displays a primary particle size of 5 to 50 nm and a BET surface area of 50 to 400 m^2/g, and
   - wherein at a given pH of the dispersion, powders A and B display the same surface charge sign, and wherein powders A and B have a zeta potential that gives rise to an electrostatic repulsion between the particles that is greater than the van der Waals attraction between the powders, and wherein in the dispersion the average particle diameter of the group A powder is 60 to 166 % of the aggregates of the group B powder and
   - wherein the proportion of powder A, relative to the sum of powders A and B, is at least 5 wt.%.

2. Dispersion according to claim 1, characterised in that the content of powders A and B in the dispersion is between 20 and 80 wt.%, relative to the total amount of dispersion.

3. Dispersion according to claims 1 or 2, characterised in that their viscosity does not exceed a value of 1500 mPas at a shear rate of 12 s^{-1} and a temperature of 23°C.

4. Dispersion according to claims 1 to 3, characterised in that powder A is a pyrogenically produced silicon dioxide.

5. Dispersion according to claim 4, characterised in that powder A displays a BET surface area of 5 to 30 m^2/g and a dispersion coefficient Z of less than 40, whereby Z =

Y/2X, where X = median value of the particle size distribution, Y = range of the particle size distribution, relative to 10 to 90 % of the cumulative particle size.

6. Dispersion according to claims 1 to 5, characterised in that the average aggregate size of powder B is 50 to 500 nm.

7. Dispersion according to claim 6, characterised in that powder B is a pyrogenically produced silicon dioxide.

8. Dispersion according to claim 6, characterised in that powder B is a pyrogenically produced mixed oxide.

9. Dispersion according to claim 8, characterised in that the mixed oxide is a silicon-aluminium mixed oxide.

10. Dispersion according to claims 1 to 9, characterised in that powders A and B are used in cationised form.

11. Dispersion according to claims 1 to 10, characterised in that it contains substances to adjust the pH, such as acids, bases or buffer systems, additives to stabilise the dispersion, such as salts, surface-active substances, organic solvents, bactericides and/or fungicides.

12. Process for producing the dispersion according to claims 1 to 11, characterised in that powders A and B are dispersed separately in an aqueous dispersion by means of a dispersing device and then combined, or that they are first physically mixed and then dispersed together, or that they are introduced into the dispersing device in portions and then dispersed together.

13. Coating slip to form an ink-absorptive coating using the dispersion according to claims 1 to 11 and at least one hydrophilic binder.

14. Coating slip according to claim 13, characterised in that the content of powder is between 10 and 60 wt.%, preferably greater than 15 wt.%, particularly preferably greater than 25 wt.%.

15. Coating slip according to claims 13 or 14, characterised in that the proportion of binder relative to the powders is between 3 and 150 wt.%, preferably between 10 and 40 wt.%, particularly preferably between 3 and 15 wt.%.

16. Process for producing the coating slip according to claims 13 to 15, characterised in that the dispersion according to the invention is added with stirring to an aqueous solution of the hydrophilic binder, to which additional additives can optionally also be added, and optionally diluted until the desired ratio of powder and binder and the desired total solids content is established.

17. Absorptive medium using the coating slip according to claims 13 to 15 and a support.

18. Process for producing the absorptive medium according to claim 17, characterised in that the coating slip is applied to the support and dried.